apparently increasing the shortness of the limb by two inches. She had during the previous year walked with crutches, and worn a boot which was raised three inches in the sole. The case appeared favourable for operation, and it was thus performed: An incision three inches long was made, commencing over the head of the femur, and passing to the outer side of the great trochanter; from the upper angle of which another incision extended inwards for two inches. The neck of the bone was divided, and the ends gouged out as before described. The flesh wound healed almost by the first intention. Movement of the limb was attempted when the cicatrix had formed, but it was difficult, and so painful, that without chloroform it could not have been borne. This passive motion was, however, continued, and at length the limb moved readily, and even some voluntary motion was gained, so that the patient could flex the limb to a right angle. After six months she could rotate the limb outwards, and sit down at ease. The pelvic obliquity was easily removed; the horizontal position being in itself almost sufficient for this purpose; and the foot was consequently brought by so much nearer to the ground. A steel support, with joints opposite to the hip, knee, and ankle, was fitted to the limb; and the buttock was supported by a leather shield. With this instrument, and a couple of sticks, the patient moved about easily. The operation has now been done two years. There is no lack of firmness about the hip-joint; but, on the contrary, it requires constant exercise to keep it free. The patient now walks without the instrument, and with one stick for support.—*Med. Times and Gazette*, Feb. 4, 1865.

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38. *Lithotrity an Eminently Successful Operation.*—Mr. HENRY THOMPSON, Surgeon to University College Hospital, in order to show that lithotrity is an eminently successful operation, adduces (*Lancet*, Feb. 25, 1865) his own personal experience of the operation during the year 1864. He gives a brief statement of every case, nineteen in number, in which he has performed and completed lithotrity during that year.

"This list comprises eighteen adults, all relieved of stones, of which but a few were small. One patient only died, and certainly not as a direct result of lithotrity, but of renal disease and renal calculus, after having recovered from the primary effects of the operation. Of these eighteen adults, the youngest was forty-five years old, the eldest seventy-five years; the majority were above sixty-two years; four were seventy and upwards; and the average age of the whole number is also, as nearly as possible, sixty-two years. No one, I presume, will imagine that for these cases the operation of lithotomy would have afforded results in any way comparable; nevertheless many of the stones were of considerable size.

"I venture to add that, in my opinion, the success of lithotrity depends upon the method adopted. During a considerable period of the history of that operation its results were undoubtedly inferior to the results of lithotomy in average hands; and if the same method be still employed, no better results can be expected."

Mr. T. proposes at an early day to offer a few remarks on what appears to him to constitute the safe and successful practice of lithotrity.

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39. *Irrigation in the Treatment of Penetrating Wounds of the Knee-Joint.*—Dr. WM. NEWMAN published in the *British Medical Journal*, for June 27th, 1857, an account of five cases of penetrating wounds of the knee-joint, successfully treated by irrigation, and in the No. of the same journal for Dec. 3d, 1864, he relates three more cases equally successfully treated by the same means.

"If cold," he observes, "be the appropriate remedy for any surgical affection, it is but a bare truism to maintain that it should be applied effectually. If this, then, is to be done in the case of some acute inflammation—of a joint, for example—the constant presence of an attendant will be imperative, who may apply thin coverings moistened with some frigorific or evaporating lotion to the part affected, and change these coverings at very frequent intervals, as they become either warm or dry. But to speak of such procedures as available or possible in everyday surgical practice would be absurd. How is cold, then, applied? Usually, a lotion is prescribed, and some material soaked in this is applied to the seat of injury. More frequently than not, and despite distinct orders, some three or four folds of material are used; thus more lotion is taken up, and the attendant's trouble is proportionally diminished. But the result is precisely the opposite to that desired by the surgeon—the surface of the cloth very speedily steams with moist vapour, while the deeper layers are reservoirs of moist heat; practically, indeed, a poultice is concocted, without the efficiency of that time-honoured compound, and this, too, employed under conditions where warmth and moisture are not desired.

"This may be an extreme view; but I, nevertheless, claim for irrigation, or water-dropping, advantages which do not attend on the most careful employment of cold in the more ordinary forms. It is easily arranged; when once put in order, it is self-acting, even for hours; it is cleanly and effective. The absence or stupidity of an attendant will not interfere with the application; and for its employment, no appliances are needed other than may be found even in the poorest cottage.

"A reservoir of water (iced, if possible), a jug, or some other convenient vessel, may be hung to some hook in the ceiling; tied to the frame of a bedstead; or, more elegantly still, attached to a suitable stand.

"The distance, from the injured part, of the water-supply, should not be less than three or four feet. If time be a great object in the treatment, or the symptoms of local injury be severe, a more speedy effect will result on the placing the jug at a greater distance above the bed on which the patient lies.

"A few threads of lamp-cotton or Berlin wool, a narrow shred of flannel, or a strip of lint from the pocket-case, may do duty as a syphon. First well-soaked in water, the shred must be so placed that one end lies at the bottom of the jar, while the other one hangs outside at a lower level. A continual dripping will so be kept up until the cistern is exhausted.

"The injured part should be kept immovable; the knee-joint should be fixed by a back splint sufficiently long and well padded, this being kept in place by a figure-of-8 bandage. The turns of the bandage must not be too tight, for, when wetted, the material shrinks very perceptibly; nor is it necessary to cover the joint itself with the folds. From hip to ankle the limb should be thoroughly supported; and, to insure this, the patient should be kept in bed. Waterproof sheeting, or an oil-cloth covering from a table, should be stretched beneath the limb, so as to prevent the wetting of the mattress; and, by adjusting this covering, a channel may readily be made, so as to direct the waste water into some dish placed on the floor.

"Next, as to the time during which this mode of treatment may be carried on. I have continued the dropping uninterruptedly for eight or ten days more than once, and without ill result; then, intermitting the flow for an hour or two at a time, I have continued the same plan for a second similar period of time—three weeks in the whole. The time usually employed is about seven or eight days; and this may be extended or shortened, according to the special requirements of each case.

"There seems to be little if any advantage from the addition of pharmaceutical compounds to the water in the jar. Possibly, when the rapid exhaustion of heat from the damaged part is a matter of importance, it would be well to add some spirits of wine to the water; or even the hydrochlorate of ammonia or nitrate of potash might be of some benefit. The instances (one or two) in which I have used some such salt, have not impressed me with any decisive idea of increased good.

"In the hot weather of summer, I have been glad to resort to the use of ice; adding this to the water in the jar, so as to reduce the temperature much below that of the surrounding atmosphere.

"The good effects which follow the persevering use of irrigation have seemed to me to depend far more on the constant evaporation of the thin layer of fluid which spreads itself over the injured part, than on the exact temperature of the water employed, or on any qualities which may have been obtained from its admixture with other substances, frigorific or sedative.

"This mode of application of cold should be used more to prevent than to arrest inflammation; to bar the development of increased vascularity, with its subsequent bad results, rather than to procure the removal of this morbid condition, once established. Hence the rule, that irrigation should be used as speedily as possible after the injury has been inflicted. When so applied, the conditions of heat, swelling, and pain will not appear; and this good result is probably to be attributed both to the sedative influence of the cold on the cutaneous nerves, and to the diminution, from the same cause, of the absolute amount of blood circulating in the capillary vessels in and around the joint. Not, however, that the occurrence of actual inflammation in an injured joint should prevent the surgeon from resorting to this most effective means of reducing the abnormal temperature. The first case noted in this paper sufficiently proves its usefulness under such conditions. Still, if irrigation be used for the first time in the second stage, the good effects will be less speedy, more slowly evident; and certain subsequent changes in the affected textures must be expected to occur—thickening, stiffness in movement, etc.

"Even under these less favourable secondary conditions, I incline to believe that irrigation has a material advantage, in comparison with the more ordinary plans of treatment. Cases may well happen in which the immediate local abstraction of blood will appear to be indicated, if only with the intent of relieving the pain of intense local congestion; but, after this, the use of cold would again be available."

40. *Effects of Common Water on Wounds and Ulcers.*—Prof. WEBER of Halle gave a lecture before the late meeting of the Association of German Naturalists and Physicians at Giessen, on this subject. He thought water was by no means an indifferent agent, and should be substituted by milk, vegetable resinous extracts, or, best, a solution of common salt in water of a certain degree of concentration. In such salt water he had let patients bathe chancrous sores with the best effect; ulcerations on the feet he had kept for a long time in such solutions, and cured them; nay, he had performed thoracentesis upon two patients while they were immersed in a bath of such salt water, and cured their empyema. In the clear salt water, it could be seen how at the expiration the thick pus issued through the wound, and how at the inspiration the salt water entered the thorax and washed out the pus.—*British Med. Journ.*, Nov. 5, 1864.

41. *Efficacy of Phosphate of Lime in Periostitis.*—The *Journal de Chimie Médicale* relates two cases of osteitis, attended with intense pain, in which Professor PIORRY resorted with much benefit to the exhibition of phosphate of lime.

In one patient the tibia and humerus were the seat of a circumscribed tumefaction and severe nocturnal pain. On superficial examination, the osseous structures seemed to have preserved their natural consistency, but plessimetric percussion of the affected parts betrayed a loss of elasticity, and an increased sonorousness of the bones. The precedents of the case being of a nature to indicate the presence of the syphilitic taint in the system, the Professor prescribed half a grain of protoiodide of mercury night and morning, fifteen grains of iodide of potassium three times a day, and the application of anodyne poultices. This treatment was steadily persevered in for three weeks, but the pain continued with unabated violence, when Mr. Piorry, taking into account the swollen and softened condition of the bones, conceived that a couple of drachms of phosphate of lime exhibited daily, concomitantly with the iodide of mercury, might possibly prove advantageous. This treatment was therefore instituted, and the issue of the case justified the Professor's surmise. In the course of forty-eight hours the osteoscopes had much decreased, and disappeared altogether after an interval of a week. The patient being at the same time an anæmic subject, with a small heart, contracted liver, and a weak pulse, which failed when the arm was kept in a raised attitude, tonics and a generous diet were likewise resorted to.

The second patient complained of excruciating pains in the left temporal region, which were at first attributed to neuralgia of the fifth pair of nerves, and treated accordingly, but without benefit, by the application of blisters dressed with morphia, and belladonna and opium internally. On closer inspection, Mr.